

# black ipa sabro

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **65**
- SRM **24.5**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **27.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **18.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount       | Yield | EBC  |
|-------|----------------------------|--------------|-------|------|
| Grain | Viking Pale Ale malt       | 5.5 kg (88%) | 80 %  | 5    |
| Grain | Strzegom Barwiący          | 0.25 kg (4%) | 68 %  | 1300 |
| Grain | Strzegom Czekoladowy jasny | 0.25 kg (4%) | 68 %  | 400  |
| Grain | Strzegom Karmel 150        | 0.25 kg (4%) | 75 %  | 150  |

## Hops

| Use for   | Name  | Amount | Time     | Alpha acid |
|-----------|-------|--------|----------|------------|
| Boil      | Sabro | 35 g   | 60 min   | 15 %       |
| Whirlpool | Sabro | 30 g   | 30 min   | 15 %       |
| Dry Hop   | Sabro | 35 g   | 2 day(s) | 15 %       |

## Yeasts

| Name            | Type | Form  | Amount | Laboratory |
|-----------------|------|-------|--------|------------|
| FM53 Voss kveik | Ale  | Slant | 200 ml | FM         |